



तमानखोला गाउँपालिका
गाउँ कार्यपालिकाको कार्यालय
बोंगादोभान, बागलुङ



गण्डकी प्रदेश, नेपाल

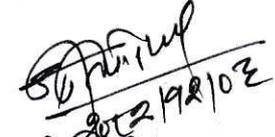
प.सं.०८२/०८३

च.नं.

मिति : २०८२/१२/०३

दररेट पेस गर्ने सम्बन्धी सूचना ।

यस कार्यालय अर्न्तगत तमानखोला आधारभूत अस्पताल, बोंगादोभान, बागलुङमा सञ्चालनमा रहेको एक्सरे मेसिन (100MA) मा Darkroom processing भईरहेकोमा सो मेसिनमा Flat Panel Detector (FPD) अथवा Computed Radiography System जडानका लागि आवश्यक सामग्री खरिद गर्नुपर्ने भएकोले कानून बमोजिम योग्यता पुगेका आपूर्तिकर्ताहरूले यसैसाथ संलग्न सामग्रीहरूको प्रचलित दररेट यो सूचना प्रकाशित भएको मितिले ७ दिन भित्र पेस गर्नु हुन अनुरोध गरिन्छ ।


२०८२/१२/०३

(अमिता परियार)

प्रमुख प्रशासकीय अधिकृत



Rate of Flat Panel Detector, Computed Radiography with Image station & Laser /Thermal Printer

1. Flat Panel Detector

Specification	Rate (Wiout VAT)	Remarks
<p>1. Description of Function</p>		
<p>A Flat Panel Detector (FPD) is a modern, digital imaging technology used primarily in medical imaging, such as X-ray. It provides a digital solution for capturing high-quality images with a range of benefits over older film-based and analogue technologies.</p>		
<p>2. Operational Requirements</p>		
<p>The Flat Panel should be a Retrofit Solution and capable to work with any of the X- Ray Machine available in Department. And should be compatible to print in existing printer available in hospital.</p>		
<p>3. System Configuration</p>		
<p>Flat Panel Detector (FPD) consists of the detector panel (with either direct or indirect conversion), a signal processing unit with ADC, image processing software, network connectivity (such as DICOM), power supply with backup, and radiation shielding, all integrated to acquire, process, store, and transmit digital images for medical applications.</p>		
<p>4. Technical Specification:</p>		
<p>Amorphous silicon with Cesium Iodide (CSi) Scintillator FPD.</p>		
<p>Portable, wireless, at least 17x17 inches size detector</p>		
<p>Detector should be water proof and water resistance must be grade IPX6/IP57/ IPX4/ IP54/IP44 including battery cell.</p>		
<p>The Pixel size should be ~ 140 microns or less.</p>		
<p>Should have a minimum image depth of 16 bit.</p>		
<p>Data communication should be wireless and wired both available.</p>		
<p>Facility of multiple exposures for long length is needed and auto stitching should be available.</p>		
<p>Battery backup of at least 3 hours on standby or at least 100 continuous images.</p>		
<p>The detector should have replaceable Lithium Polymer battery.</p>		
<p>The Detector should be able to withstand surface load of 170kg or more.</p>		
<p>Easy Switch from sleep mode to acquisition mode for better battery performance.</p>		
<p>The detector should be provided with two batteries along with a set of battery charger.</p>		
<p>Software should have DICOM & PACS connectivity as a standard feature.</p>		
<p>5. Image Station:</p>		
<p>Compatible PC: - CPU – Latest model processor, RAM – 8 GB, HDD – 500GB, latest windows 10 64/32bit with UPS.</p>		
<p>Display Monitor: at least 24" size</p>		
<p>Come with free software upgrade within the lifespan of the system. Bidder must declare his compliance with this condition here.</p>		
<p>Measurement tools, zoom and Pan, Brightness and contrast adjustment, horizontal and vertical flip, actual size printing capability for accurate representation of anatomical size. Feature to support emergency patient study, auto reason and functionality with reason.</p>		
<p>6. Accessories and spare parts and consumables</p>		
<p>All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above).</p>		
<p>UPS of suitable rating for at least 30 min. backup shall be supplied.</p>		
<p>7. Operating Environment:</p>		

<p>The system offered shall be designed to be stored and to operate normally under the conditions of the purchaser's country. The conditions include Power Supply, Climate, Temperature, Humidity, etc.</p>	
<p>Power supply: 220–240V AC, 50Hz fitted with appropriate plug type. The power cable must be at least 3 meter in length</p>	
<p>8. Standards and Safety Requirements:</p>	
<p>Must submit ISO13485 for Medical Devices</p>	
<p>Must submit valid European CE in compliance with 93/42/EC or MDR (EU) 2017/745 issued from an EU registered notified body having notification number or a Declaration of Conformity must be submitted if it is a low-risk class I product along with all related regulatory documents and USFDA approved product certificate.</p>	
<p>Shall comply with IEC 60601-1-2 : Medical Electrical Equipment Electromagnetically Compatibility Requirement for Medical Devices.</p>	
<p>9. User Training:</p>	
<p>The Supplier shall conduct user training for this equipment to enable operators to use the equipment properly. The training shall include the use of all operational functions of the equipment, as well as routine checks and maintenance expected by users.</p>	
<p>10. Warranty:</p>	
<p>Comprehensive warranty for 2 years from the date of installation and extra 1 years free after sales service upon completion of warranty must be provided.</p>	
<p>11. Maintenance Service During Warranty Period:</p>	
<p>During the warranty period supplier must ensure preventive and corrective/breakdown maintenance whenever required.</p>	
<p>Should provide technical support and spare availability for at least of 5 years with immediate response.</p>	
<p>12. Installation and Commissioning:</p>	
<p>The supplied system should be compatible with the various Brand X-ray machines available at the Hospital site.</p>	
<p>The bidder must arrange for the equipment to be installed by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail.</p>	
<p>Suppliers should arrange the required electrical supply and necessary wiring to run their Digital Radiography complete system.</p>	
<p>Bidder to handover the complete system in operational condition to the hospital, additional components, accessories, spares etc. are to be arranged by the bidder during the installation and commissioning.</p>	
<p>13. Documentation:</p>	
<p>The bidder should submit the original brochure or e-copy.</p>	
<p>User (Operating) Service (Technical / Maintenance) manual in English manual in English</p>	
<p>List of important spare parts and accessories with their part numbers and costing.</p>	
<p>Bidders must completely fill the Technical Specification Form (TSF). Only YES/NO/COMPLY should not be written. Page number in the catalogue must be clearly mentioned and highlighted.</p>	



2. Computed Radiography System

Specification	Rate (without VAT)	Remarks
1. Description of Functions		
Radiography system to replace conventional Film/Screen based X-Ray processing techniques with Photostimulable Phosphor Plate technology to obtain digital X-ray images.		
2. Operational Requirements		
2.1 The system shall be able to record X-Ray images on Imaging Plates (IP).		
2.2 Convert these images from the IP into digital values and transfer these values to an image evaluation computer with predefined Image Processing Parameters.		
2.3 Retrieve and reproduce accurate, high-quality high-resolution images from stored data without loss of image quality.		
3. System Configurations		
3.1 Image Reader system : 01		
3.2 Colour dry view imaging printer (film based): 01		
3.3 CR Workstation with Archiving System: 01		
4. Technical Specifications		
4.1 Image Reader System:		
Scanning mechanism to read, erase and process the images from the imaging plate. (IP)		
Including auto routing newly acquired images to desired preview monitor.		
IP processing rate > 40 plates/hr. or more.		
Output grayscale resolution of 14 bits / pixel or more		
X-Ray Generator compatibility with other reputed manufacturers		
4.2 CR Workstation and Server(with preview and Archive):		
Software should have graphic selection to allow quick and easy picking of body parts and views.		
Capable of Archiving and printing selected images to a standard DICOM format		
Multifunctional console providing all image optimization and post processing features such as, changing R/L, Flipping, Rotating, Zooming, Collimating, geometric corrections, windowing, annotations like markers, predefined text, drawing lines and geometrical shapes, multi scale image processing, measuring distance and angle, shuttering, histograms, zoom, gray scale reversal, edge enhancement, noise reduction, etc		
Multi-image and slide formats.		
Capability of storing in CD/DVD.		
Storing images in the local disk for predefined period.		
Should be compatible with HL-7, RIS/HIS and PACS system.		
4.3 Colour Dry View Imaging Printer(film based):		
Printer should have dry Laser image Technology, compatible with DICOM and PACS without loss of information.		
The system must have at least two online film sized tray and should be capable of printing any of the films simultaneously.		
Resolution> 500 DPI or more.		
The imager should support daylight loading.		
5. Accessories, Spare Parts and Consumables		
IP/ Cassettes size:		
8 x 12 inches – 1 unit		
10 x 12 inches – 1 unit		
14 x 17 inches – 1 unit		
Compatible Computer whole set (Intel i5 processor, 6 GB RAM and 19" LCD monitor) – 1 set		



Air Conditioning Unit (1.5 ton) – 1 unit	
Online UPS- 5 KVA	
All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer.	
6. Operating Environment	
The system offered shall be designed to be stored and to operate normally under the conditions of the purchaser's country. The conditions include Power Supply, Climate, Temperature, Humidity, etc.	
Power supply: 220 – 240 VAC, 50Hz Single Phase fitted with appropriate plug. The power cable must be at least 3 metre in length.	
Suitable UPS with maintenance free batteries, voltage regulation and spike protection for minimum 30 min. back-up shall be supplied with the system.	
7. Standards & Safety Requirements	
Must submit ISO13485 for Medical Devices AND	
CE (93/42 EEC Directives) or USFDA approved product certificate.	
Shall comply with IEC 60601-1 - General requirement for electrical safety of medical equipment.	
8. User Training	
Must provide user training (including how to use and maintain the equipment).	
9. Warranty	
Comprehensive warranty for 2 years after acceptance.	
10. Maintenance Service During Warranty Period	
During warranty period supplier must ensure preventive maintenance & corrective/breakdown maintenance whenever required.	
11. Installation and Commissioning	
The bidder must arrange for the equipment to be installed by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail.	
12. Documentation	
The bidder should submit a valid authorization from the manufacturer.	
The bidder should submit the original brochure or e-copy.	
User (Operating)/ Service (Technical / Maintenance) manual in English.	
Certificate of calibration and inspection from factory.	
Bidder must completely fill the Technical Specification Form (TSF). Only Yes/no/all complies should not be written. Page number in the catalogue of all the required parameters must be clearly mentioned and highlighted. Failure in doing so may lead to rejection of bid from technical committee.	



3. Laser /Thermal Printer:

Specification	Rate (without VAT)	Remarks
Printer should have dry Laser image / thermal Technology, compatible with DICOM and PACS without loss of information, allowing multiple modalities to be connected at a time.		
Printing capacity more than 60 sheets/ hour.		
Film Print Sizes: 14 x17, 10 x 12, 8 x 10		
Resolution> 500 DPI or more.		
Daylight film loading		
Shall be able to switch between receiver mode and processor mode.		